Chiral Ammonium Salt Catalyzed Asymmetric Alkylation of Unactivated Amides

C. Xu, X. Yang
Catalytic Deoxygenative Cyclopropanation of 1,2-Dicarbonyl or Monocarbonyl Compounds via Molybdenum Catalysis

J.-L. Wang
C.-X. Zhuo*
Xiamen University, P. R. of China

unprecedented Mo-catalyzed deoxygenative cyclopropanation

mild reductant (PR₃ or R₃SiH)

36 examples up to 90% yield

Stereoselective Michael Additions of Arylacetic Acid Derivatives by Asymmetric Organocatalysis

B. Kim
Y. Kim
S. Y. Lee*

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Recent Advances in the Synthesis of Diverse Libraries of Small-Molecule Building Blocks in Ionic Liquids (ILs)

K. K. Laali *
R. G. Kalkhambkar *
S. M. Sutar
University of North Florida, USA
Karnatak University, India

The [4.3.0] Piperidine Alkaloids: Architectures, Biology, Biosyntheses, and the Complete Details of the Asymmetric Syntheses of Streptazone A and Abikoviromycin

G. J. Wørmer
T. B. Poulsen *
Aarhus University, Denmark

Synthesis of β-anti-Substituted α-Amino Acids through Iridium-Catalyzed Alkylation/Chelation-Controlled Nucleophilic Addition

P. Wang
R. Zhao
J. Wang
X. Wang *
Lanzhou University,
P. R. of China

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Visible-Light-Promoted Indole C-3 Formylation Using Eosin Y as a Photoredox Catalyst

Y. Zhao
H. Li
S. Yin
Y. Wu
G. Ni*
Yunnan University of Chinese Medicine, P. R. of China

Visible-Light-Promoted Indole C-3 Formylation Using Eosin Y as a Photoredox Catalyst

- Reaction Conditions:
  - Air, blue LEDs, KI, MeCN–H₂O
- Mild reaction conditions (air, water)
- Wide substrate scope (19 examples)

Chiral Ammonium Salt Catalyzed Asymmetric Alkylation of Unactivated Amides

C. Xu*
X. Yang
Lanzhou Jiaotong University, P. R. of China

Chiral Ammonium Salt Catalyzed Asymmetric Alkylation of Unactivated Amides

- Catalytic system: Catalyst (10 mol%), NaHMDOS (1.0 eq)
- Homogeneous catalysis
- Up to 80:20 er

Outside-In Strategy for Peptide-Based Methacrylate and Methacrylamide Zwitterionic Cross-Linkers

M. Chakraborty
K. V. Waynant*
University of Idaho, USA

Outside-In Strategy for Peptide-Based Methacrylate and Methacrylamide Zwitterionic Cross-Linkers

1. Peptide coupling(s)
2. TFA global deprotection
- Serine: n = 1, Y = O
- Lysine: n = 4, Y = NH
 Spirocyclic Products via Carbene Intermediates from Thermolysis of 1,2-Dialkynylpyrrole and 1,2-Diethynylimidazole

A. L. Jewett, J. A. Bondoc, B. L. Gilbreath, B. J. Reinus, S. M. Kerwin*
Texas State University, USA

Photoredox One-Pot Synthesis of 3,4-Dihydroquinolin-2(1H)-ones

J.-Y. He, Q.-F. Bai, X. Li, J. Shou*, G. Feng*
Shaoxing University, P. R. of China

Bridging Chlorine Atoms Enable the Construction of a Novel Benzimidazole-Derived Fluorescent Molecule

X. Yan, B. Jiang, G. Fan, Y. Zou, W. Sang, C. Chen*, Y. Yuan*
Wuhan University of Technology, P. R. of China
1,4,2-Dioxazol-5-ones as Isocyanate Equivalents: Chemoselective Non-Metal-Catalyzed Carboxamidation of Indoles

A. Vala
D. Parmar
R. Rayani
R. Kusurkar
R. Guduru
U. Kaneriya
U. Gondaliya
N. Parmar
J. Y. Soni*
The Madhav University, India

Bismuth(III) Triflate-Catalyzed Intermolecular Cyclization of Phenols with Diols: Direct Access to O-Heterocycles

M. Minakawa*
Y. Sakurai
Yamagata University, Japan